



United Nations  
Educational, Scientific and  
Cultural Organization



# Artificial Intelligence for Sustainable Development

## Programme

4-8 March 2019  
UNESCO, Paris



Monday 4 March

**PRINCIPLES FOR AI:  
TOWARDS A HUMANISTIC  
APPROACH?**

A Global Conference

Tuesday 5 March

**POLICY FORUM  
AND  
WORKSHOPS**

Wednesday & Thursday 6 - 7 March

**SYMPOSIUM**

Friday 8 March

**STRATEGY LABS  
& INTERNATIONAL  
WOMEN'S DAY**

Monday 4 to Thursday 7 March 2019

**EXHIBITS**



mobile  
learning  
week

semaine  
de l'apprentissage  
mobile

semana  
del aprendizaje  
móvil

неделя  
мобильного  
образования

移动学习周

أسبوع التعلُّم عبر  
الأجهزة المحمولة

For notifications, get the MLW app!



1. Download the Angage app
2. Look for MLW in the search bar

In partnership with



ProFuturo

Committed to education.

SKILLLOGS  
AI-POWERED LEARNING

Sponsored by



Supported by



AI has risen to the forefront of public discourse in recent years. The breakthrough in AI is on an accelerated development path, and has been further propelled by innovations in other frontier technologies, including cloud computing, big data, Internet of Things, and virtual reality. As a convergence of a widening spectrum of frontier technologies, AI has garnered the potential to bring new possibilities for global development and societal change.

The transformative power of AI crosses all economic and social sectors, including the education sector. In particular, AI has the potential to accelerate the process of achieving Sustainable Development Goal 4. It promises to reduce barriers to access education, automate management processes, analyse learning patterns and optimise learning processes with a view to improving learning outcomes. However, the penetration of AI in education comes with concerns about ethics, security and human rights. Without policy intervention, the commercial deployment of AI will also exacerbate digital divides and deepen existing income and learning inequalities, as marginalised and disadvantaged groups are more likely to be excluded from AI-powered education.

The rapid growth in AI technologies will also significantly impact the skills required by different sectors. Already today, there is a major skills gap in the labour market when it comes to AI-related jobs and skills. Educational institutions and training providers will need to address these skills gaps to ensure that future graduates will meet the requirements of the job market and enable an AI-literate citizenry.

As frontier technologies, AI processors and AI applications become the new norm for smartphones and other mobile devices, mobile learning is entering a new epoch. At the dawn of the next generation of mobile learning, AI-augmented mobile learning - Intelligent Mobile Learning - has arrived, but its key potentials remain to be explored and unleashed. There is a strong need for a holistic review of its implications for equity and inclusion in education, efficiency of education management, quality of learning, and skills development.

To maximize AI's benefits and mitigate its potential risks, system-wide planning and collective actions to reinvent the core foundation of education and learning are required. The rapid deployment of AI in education tests the readiness of stakeholders to harness AI, posing new challenges pertinent to all areas of education and learning, such as policy planning, curriculum and resources development, teacher education, and skills development.

Mobile Learning Week is a United Nations flagship ICT in education event. UNESCO, in partnership with its confirmed partners – the International Telecommunication Union, the ProFuturo Foundation and Skilllogs – will convene a special edition of Mobile Learning Week (MLW) from 4 to 8 March 2019, at the UNESCO Headquarters building in Paris (France).



**“Education will be profoundly transformed by AI. Teaching tools, ways of learning, access to knowledge, and teacher training will be revolutionized.”**

**Audrey Azoulay**  
Director-General of UNESCO

The five-day event, under the theme ‘Artificial Intelligence for Sustainable development’ will start with the ‘Global Conference - Principles for AI: Towards a humanistic approach?’, followed by a one-day Policy Forum and Workshops, a two-day International Symposium and a half-day of Strategy Labs.

On 8 March, towards the close of MLW, participants will be invited to join the celebration of International Women’s Day, particularly a debate on Women in AI to be held in UNESCO Headquarters. During the entire week, exhibitions and demonstrations of innovative AI applications for education and more than 20 workshops will be organized by international partners and all programme sectors of UNESCO.

# Principles for AI: Towards a Humanistic Approach? A Global Conference

Monday, 4 March 2019

*International experts agree: Humanity is on the threshold of a new era. Rapid technological advancements in artificial intelligence (AI) – as well as other evolving technologies such as robotics, big data analytics, and the Internet of Things – are changing the way we learn, work and live together. This transformation has already begun and while it affects all aspects of our lives - are we prepared?*

*Research and applications in the field of AI are advancing at a very rapid pace, whilst the legal, policy and ethical instruments that are needed to guide and shape AI are evolving slowly. How far should a machine's autonomy and its decision-making power be allowed to go? How can we govern AI? Who decides what values and priorities are programmed in the algorithms of machines? If an AI miscalculation results in an accident, who is accountable? What, if anything, is off-limits to AI? These and many other questions remain unanswered today.*

*Investing in the development of an ethical and human centred AI means that we need to address the challenges and opportunities that AI presents for today, tomorrow and beyond. We must equip current and future generations with the necessary tools to harness AI for sustainable development and ensure that it operates based on human rights, a shared set of values and ethics for the benefit of all humanity. It is widely recognized that AI has enormous potential for developing knowledge societies, for social good and accelerating human progress. AI can help address many of humanity's most critical issues: including those related to education, the sciences, culture, media, access to information, gender equality, poverty alleviation and climate change. Yet these major opportunities that AI offers can only be unleashed, if it is developed with respect to universal norms and standards, and if it is anchored in peace and humanism, focused on achieving sustainable development.*

*In response to the major transformations of our societies due to AI, UNESCO - as a global laboratory of ideas, standard setter, policy advisor and capacity builder - will play a leading role in facilitating international cooperation and shaping its future. UNESCO's mandate calls inherently for a human-centred approach to AI; to shift the conversation to include AI's role in addressing current inequalities regarding access to knowledge, research and the diversity of cultural expressions and to ensure AI does not widen the technological divides within and between countries. The promise of "AI for all" must be that everyone can take advantage of the technological revolution under way and access its fruits, notably in terms of innovation and knowledge.*

*Building on its record of multi-stakeholder consultation and consensus building, UNESCO will bring together stakeholders from the public and private sector, technical community, media and academia, civil society and international organizations. The conference will facilitate dialogue between stakeholder groups on the potential benefits and challenges of AI and its applications. Discussions will focus on the universal aspects of AI, its ethical dimensions, and ways to ensure human-centred and ethical design of AI principles and frameworks rooted in international cooperation.*

Masters of ceremony: The Havens Family		
08:00 – 09:30	<b>Registration</b>	
09:30-10:00	<b>Opening session</b> <ul style="list-style-type: none"> <li>• Ms Audrey Azoulay, Director General, UNESCO</li> <li>• Mr Angel Gurría, Secretary-General, OECD</li> </ul> <b>Setting the scene: Demystifying AI</b> <ul style="list-style-type: none"> <li>• Mr Tapiwa Chiwewe, Research Manager, IBM Research Africa</li> </ul>	Room 1
10:00 – 10:10	<b>The Havens Family, Family of the Future: AI in Everyday Life</b>	Room 1
10:10 - 10:25	<b>Keynote 1: Mr Cédric Villani, Member of the French Parliament, AI Specialist, Fields Medal winner 2010</b>	
10:30-11:45	<b>Plenary session 1: Challenges and opportunities of AI</b> <p>The development of artificial intelligence offers both opportunities and challenges as it concerns the global goals for sustainable development. What are some of the main challenges and opportunities in ensuring the development of artificial intelligence that serves humanity? How can AI contribute concretely to sustainable development? How can AI potentially both increase and fight biases, notably in the domain of gender equality, discrimination, and narrowing the digital divides? Are there good practices in public policy development at the national level in the field of AI and if so, what are they?</p>	

	<p>Moderator: Ms Cathy Mulligan, Visiting Research Fellow, Centre for Cryptocurrency, Imperial College, United Kingdom</p> <p>Panelists:</p> <ul style="list-style-type: none"> <li>• Ms Bunmi Banjo, Managing Director, Kuvora Inc.</li> <li>• H.E. Omar Bin Sultan Al Olama, Minister of State for Artificial Intelligence, United Arab Emirates</li> <li>• Mr Nicolas Economou, Founder and CEO, H5</li> <li>• Mr Seng Yee Lau, Senior Executive Vice President, Tencent</li> <li>• Mr Thomas Myrup Kristensen, Managing Director for EU Affairs, Head of Brussels office, Facebook</li> <li>• Ms Marija Manojlovic, Strategy, Data and Innovation Advisor, The Global Partnership to End Violence Against Children</li> <li>• Mr Luis Enrique Sucar, Senior Research Scientist, Instituto Nacional de Astrofísica, Óptica y Electrónica, Mexico</li> </ul>	
11:45-13:00	<p><b>Plenary session 2: The universality of AI?</b></p> <p>The development of artificial intelligence directly impacts all domains of UNESCO's mandate. Teaching tools, ways of learning, access to knowledge, and teacher training will be revolutionized. The question of what skills to develop in order to evolve in an increasingly automated world will become more and more central. AI is changing the way we think about heritage reconstruction, and contemporary creative production. Environmental programmes and underwater research are being transformed by AI-driven technologies, and the ethical dimensions of artificial intelligence are at the heart of preoccupations of governments and everyday citizens. Communication and information are being directly impacted by advances in AI, through the development of algorithms and evolutions in access to information and media production.</p> <p>What does universality, a fully inclusive approach, mean in AI, and what could it look like? Why is universality in AI, both in terms of geography and stakeholders, important? How do we govern AI, and who does what in a multi-stakeholder approach? What are the key factors for a sound enabling environment for AI?</p> <p>Moderator: Mr Andrés Roemer, UNESCO Goodwill Ambassador for Social Change and the Free Flow of Knowledge, writer, philanthropist, human rights activist</p> <p><b>Ensuring a global approach:</b></p> <ul style="list-style-type: none"> <li>• Mr Abdoulaye Baniré Diallo, Professor, Université du Québec à Montréal, Chief Scientist and Co-founder, My Intelligent Machine, Canada</li> <li>• Mr Raja Chatila, Professor of Artificial Intelligence, Robotics and Ethics, Sorbonne University, France</li> <li>• Ms Anriette Esterhuysen, Director of Global Policy and Strategy, Association for Progressive Communications (APC)</li> <li>• Mr Miguel Luengo-Oroz, Chief Data Scientist, UN Global Pulse</li> <li>• Mr Nicolas Mialhe, Co-Founder and President, The Future Society</li> </ul> <p><b>Ensuring a multi-stakeholder approach:</b></p> <ul style="list-style-type: none"> <li>• Ms Hawa Ba, Head of the Senegal Country Office, OSIWA</li> <li>• Mr Katsumi Emura, Chief Technology Officer, NEC</li> <li>• H.E. Mr Jernej Pikalo, Minister of Education, Science and Sport, Slovenia</li> <li>• Mr Francois Taddei, Director of the Center for Interdisciplinary Research, France</li> <li>• Mr Ulrik Vestergaard Knudsen, Deputy Secretary-General, OECD</li> </ul>	Room 1
13:00-14:30	<b>Lunch</b>	
14:30 – 15:00	<p><b>Keynote 2: Ms Nanjira Sambuli, Senior Policy Manager, World Wide Web Foundation, and Mr Philip Dawson, Lead Public Policy, Element AI</b></p>	Room 1
15:00 – 16:15	<p><b>Plenary session 3: Towards a human-centred ethical AI?</b></p> <p>If we are to make the most of the possibilities offered by AI to the world, we must ensure that it serves humanity, with respect for human rights and human dignity, as well as our environment and ecosystems. Today, no global ethical framework or principles for AI developments and applications exist. UNESCO is a unique universal forum with over twenty years of experience in developing international instruments related to bioethics and the ethics of science and technology. It has the responsibility to lead an interdisciplinary, pluralistic, universal, and enlightened debate – not a technical debate, but an ethical one – in order to enter this new era with our eyes wide open, without sacrificing our values, and to make it possible to establish a common global foundation of ethical principles.</p>	

	<p>What do we mean exactly by a human centred and ethical AI? What are the immediate and potential long-term ethical challenges raised by AI in the domains of UNESCO's mandate? What are some of the challenges in establishing ethical frameworks and principles in this field? Does this definition change in different regions of the world? What is a possible way forward and who needs to be involved in the conversation?</p> <p>Moderator: Mr John Shawe-Taylor, UNESCO Chair in AI, Professor of Computational Statistics and Machine Learning, University College London, UK</p> <p>Introductory remarks: Mr Sang Wook Yi, Philosophy professor, Hanyang University, Republic of Korea, Member, World Commission on the Ethics of Scientific Knowledge and Technology, UNESCO</p> <p>Panelists:</p> <ul style="list-style-type: none"> <li>• Mr Bernd Carsten Stahl, Professor of Critical Research in Technology, Director of the Center for Computing and Social Responsibility, De Montfort University, United Kingdom</li> <li>• Ms Dorothy Gordon, Chair, Information For All Programme, UNESCO</li> <li>• Mr Edson Prestes, Institute of Informatics, Federal University of Rio Grande do Sul, Brazil</li> <li>• Ms Emma Ruttkamp-Bloem, Professor in Philosophy of Science, University of Pretoria, Leader of Ethics of AI research group, Centre for Artificial Intelligence Research (CAIR), South Africa</li> <li>• Mr Osamu Sudo, Professor, University of Tokyo, Chair, Council for Social Principles of Human-Centric AI, Japan</li> <li>• Mr Sang Wook Yi, Philosophy professor, Hanyang University, Republic of Korea, Member, World Commission on the Ethics of Scientific Knowledge and Technology, UNESCO</li> <li>• Mr Lan Xue, Dean of Schwarzman College, Tsinghua University, China</li> </ul>	
16:15 – 16:30	<b>Coffee break</b>	
16:30 – 16:45	<b>Keynote 3: Mr Marcus Goddard, Partner, Netexplo</b>	Room 1
16:45 – 18:00	<p><b>Plenary session 4: New architectures of international cooperation on AI</b></p> <p>UNESCO, as a standard setter and laboratory of ideas, has a role to play in shaping international debate on the future of AI and its governance; its multidisciplinary mandate positions the Organization to address the ethical and social implications of AI and promote its development that takes into consideration human-centred values. How can multilateral cooperation on AI be ensured between relevant international, regional, and national bodies so that we are not reinventing the wheel as it concerns the development of norms and standards in this domain? What strategies, frameworks, and principles have been developed at the national or regional level in relation to AI and human-centred values? What remains to be done and what is the role of UNESCO?</p> <p>Moderators: Students from Sciences Po Paris School of International Affairs Class "Governing the Rise of AI: A Global Perspective"</p> <p>Panelists:</p> <ul style="list-style-type: none"> <li>• Mr Houlin Zhao, Secretary-General, ITU</li> <li>• Mr Amandeep Singh Gill, Executive Director, Secretariat of the High-level Panel on Digital Cooperation (ex officio)</li> <li>• Ms Gabriella Battaini-Dragoni, Deputy Secretary-General, Council of Europe</li> <li>• Mr Fabrizio Hochschild Drummond, Assistant Secretary-General for Strategic Coordination, Executive office of the Secretary-General of the United Nations</li> <li>• Mr Roberto Viola, Director-General of the EU Directorate-General for Communications Networks, Content and Technology, European Commission</li> <li>• Ms Boutheina Guermazi, Director of Digital Development, Infrastructure practice group, World Bank Group</li> <li>• UNESCO</li> </ul>	Room 1
18:00 – 19:00	<p><b>Setting the foundation for a humanistic approach to AI: A way forward</b></p> <p><b>Ministerial Round Table</b></p> <p>Moderator: Mr Jean-Michel Jarre, UNESCO Goodwill Ambassador, French composer, performer and record producer</p> <p>Ministerial interventions</p> <p><b>Introductory remarks:</b> Mr Norikazu Suzuki, Parliamentary Vice-Minister for Foreign Affairs, Japan</p> <p>Closing remarks</p>	Room 1
19:00 – 21:00	<b>Cocktail - Restaurant, 7th floor of the Fontenoy Building</b>	

# Policy Forum and Workshops

## Day 2 – Tuesday, 5 March 2019

*The Policy Forum will offer a platform to discuss the different pathways that governments are using to harness AI and ensure that AI does not deepen the existing inequalities in education. A number of Ministers of Education and ICT from various countries will be invited jointly by UNESCO and ITU.*

*The Workshops, selected through a call for proposals, will facilitate demonstrations of innovative policies, research, projects and solutions that use AI tools and frontier technologies for education and learning. The Workshop presenters are to be chosen from a wide range of international organizations, NGOs, governmental agencies and academic institutions.*

*Following up on the Global Conference, the Communication and Information Sector (CI), Science Sector (SC), Culture Sector (CL) and Social and Human Sciences Sector (SHS) will organize workshops on the implications of AI in the key areas of UNESCO.*

**Interpretation is provided in English and French in Room 4.**

POLICY FORUM		
08:30 – 09:00	<b>Registration</b>	
09:00 – 09:30	<b>Welcome and introduction</b> <ul style="list-style-type: none"> <li>• Ms Stefania Giannini , Assistant Director-General for Education, UNESCO</li> <li>• Mr Kemal Huseinovic, Chief of the Infrastructure, Enabling Environment and E-Applications Department/BDT, ITU</li> <li>• Ms Sofia Fernandez de Mesa, Managing Director, ProFuturo Foundation</li> </ul>	Room 4
09:30 – 09:50	<b>Keynote speech</b> <b>AI and New Horizons for Education: Lessons Learned from Finland</b> Mr Teemu Roos, Associate Professor, Department of Computer Science, University of Helsinki, Finland	
09:50-10:15	<b>Presentation</b> <b>Education policy and the challenges of Artificial Intelligence: Does anyone know the way ahead?</b> <ul style="list-style-type: none"> <li>• Mr Francesc Pedro, Chief, Section of Education Policy, UNESCO</li> <li>• Ms Paula Valverde, Head of Product and Innovation, ProFuturo Foundation</li> </ul>	
10:15-11:30	<b>SESSION 1</b> <b>What policies are needed to harness AI to accelerate progress towards SDG 4?</b> Moderator: Mr Borhene Chakroun, Director, Division for Policies and Lifelong Learning Systems, UNESCO <ul style="list-style-type: none"> <li>• Mr Rupert Schlegelmilch, on behalf of the European Commissioner for Digital Economy and Society, European Commission</li> <li>• H.E. Mr Omar Sultan Al Olama, Minister of State for Artificial Intelligence, United Arab Emirates</li> <li>• H.E. Ms Amina Mohammed, Cabinet Secretary, Ministry for Education, Kenya</li> <li>• H.E. Mr Sabri Saidam, Minister of Education and Higher Education, Palestine</li> <li>• Mr Claudio Cimelli, Director of Digital Education, Ministry of National Education and Youth, France</li> <li>• Ms Rose Luckin, Professor, Learner Centered Design at UCL Knowledge Lab, United Kingdom</li> </ul>	
11:30 – 11:45	<b>Coffee break</b>	
	<b>Educative platform (MOOC) with creativity and participatory sciences approach using IoT boards, presented by students</b> Examples of good practices, supported by the Ministry of Education of France	Exhibition area

11:45 – 13:15	<p><b>SESSION 2</b></p> <p><b>What policies are needed to ensure frontier technologies and AI can support digital transformation, e-learning and digital skills development?</b></p> <p>Moderator: Mr Jonathan Vesey, Market Engagement Director, Connected Society, GSMA</p> <ul style="list-style-type: none"> <li>• H.E. Ms Wanda Buk, Undersecretary of State, Ministry of Digital Affairs, Poland</li> <li>• H.E. Ms Ursula Owusu-Ekufu, Minister of Communications, Ghana</li> <li>• Ms Tracey Burns, Senior Analyst, OECD</li> <li>• Mr Ivan Ostrowicz, CEO, Domoscio, France</li> <li>• Mr Mick Levy, Director of Innovation, Business and Decision Services, Orange Group</li> <li>• Ms Jonghwi Park, Programme Specialist, UNESCO Bangkok</li> </ul>	Room 4
13:15 – 14:30	<b>Lunch break</b>	
	<p><b>Educative platform (MOOC) with creativity and participatory sciences approach using IoT boards, presented by students</b></p> <p>Examples of good practices, supported by the Ministry of Education of France</p>	Exhibition area
14:30 – 16:00	<p><b>SESSION 3</b></p> <p><b>What policies are needed to ensure inclusiveness in the use of accessible ICTs and AI in education?</b></p> <p>Moderator: Ms Roxana Widmer-Iliescu, Senior Programme Officer, Digital Inclusion Division, ITU/BDT</p> <ul style="list-style-type: none"> <li>• H.E Ms Maria-Manuela Catrina, Secretary of State, Ministry of Communications and Information Society, Romania</li> <li>• Mr Javier Elguea, Director of Education, Carlos Slim Foundation</li> <li>• Mr Axel Rivas, Director of the School of Education at the University of San Andrés, Argentina</li> <li>• Mr Miguel Ángel Valero, Director of Ceapat Imsero, Spain</li> <li>• Ms Placencia Porrero, Senior Expert of the Disability and Inclusion Unit, European Commission</li> <li>• Ms Alexa Joyce, Director, Education System Leaders, Microsoft</li> </ul>	Room 4
16:00 – 16:15	<b>Coffee break</b>	
	<p><b>Educative platform (MOOC) with creativity and participatory sciences approach using IoT boards, presented by students</b></p> <p>Examples of good practices, supported by the Ministry of Education of France</p>	Exhibition area
16:15 – 17:45	<p><b>SESSION 4</b></p> <p><b>What policies are needed to empower and prepare teachers for AI-powered learning environments?</b></p> <p>Moderator: Mr Tao Zhan, Director, UNESCO Institute for Information Technologies in Education</p> <ul style="list-style-type: none"> <li>• Mr Adrian Lim, Director, Digital Participation and Foresight Division, Digital Readiness Cluster, IMDA, Singapore</li> <li>• Mr Wayne Holmes, Assistant Professor, openAIED, UK</li> <li>• Mr Nathanael Gossaye, Co-Founder/CEO LangBot, Ethiopia</li> <li>• Mr Andrew Smith Lewis, Co-founder of CEREGO, United States</li> <li>• Mr Pierre-Jean Loiret, Director, Partnerships, University Agency of the Francophonie, France</li> <li>• Mr Anantha Kumar Duraiappah, Director, UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development</li> </ul>	Room 4
17:45-18:00	<p><b>Concluding remarks</b></p> <ul style="list-style-type: none"> <li>• Mr Kemal Huseinovic, Chief of the Infrastructure, Enabling Environment and E-Applications Department/BDT, ITU</li> <li>• Mr Borhene Chakroun, Director, Division for Policies and Lifelong Learning Systems, UNESCO</li> </ul>	
18:15-19:45	<p><b>Cocktail reception</b></p> <p><b>Official launch of the first comprehensive french NLP* Dataset, followed by a cocktail evening served by the Robot Pepper – organized by Skillogs</b></p>	7th floor



WORKSHOPS				
08:00 – 10:00	<b>Registration and Policy Forum opening</b> (Room 4)			
10:00-11:30	<b>'Learning and Skills' Workshops</b>			<b>'Freedom of Expression and Access to Information' Workshops</b>
	<b>Creating next-generation digital courses: Using AI to support personalized, collaborative, socio-emotional learning</b> UNESCO MGIEP <b>Room 6</b>	<b>Leveraging Artificial Intelligence in higher education</b> International Association of Universities (IAU) <b>Room 9</b>	<b>Artificial Intelligence and disinformation</b> Communication and Information Sector, UNESCO <b>Room 2</b>	<b>AI hands-on for young learners in Africa</b> Communication and Information Sector, UNESCO <b>Room 7</b>
11:30 – 11:45	<b>Coffee break</b>			
11:45 – 13:15	<b>'Learning and Skills' Workshops</b>			<b>'Science and Society' Workshops</b>
	<b>The impact of artificial intelligence on occupations: Is there a place for intermediate level occupations?</b> JET Education Services, South Africa <b>Room 6</b>	<b>Towards a UN-wide strategy on the future of education and learning</b> Education Sector, UNESCO and UNICEF <b>Room 7</b>	<b>Artificial Intelligence and language learning: A live experience</b> Skilllogs <b>Room 3</b>	<b>Apps for environmental monitoring: Fostering citizen scientists or just another consumer product?</b> Natural Sciences and Social and Human Sciences Sectors, UNESCO <b>Room 9</b>
13:15 – 14:30	<b>Lunch break</b>			
14:30 – 16:00	<b>'Learning and Skills' Workshops</b>			<b>'Freedom of Expression and Access to Information' Workshops</b>
	<b>Evaluating the impact of education programs: Methods and case studies</b> ProFuturo Foundation Peru, La Caixa Foundation, J-PAL, Education Endowment Foundation, and KSNET <b>Room 6</b>	<b>Challenges and approaches to capacity building in the age of artificial intelligence</b> ITU and Huawei <b>Room 3</b>	<b>Looking at AI through a gender-lens</b> BMZ <b>Room 5</b>	<b>The holistic approach:</b> Launch of AI primer reflection on rights, openness, access and multi-stakeholder participation Communication and Information Sector, UNESCO <b>Room 9</b>
16:00 – 16:15	<b>Coffee break</b>			
16:15 – 18:00	<b>'Learning and Skills' Workshops</b>			<b>'Freedom of Expression and Access to Information' Workshops</b>
	<b>The next wave of disruption: Teaching and learning in the AI era</b> Hamdan Bin Mohammed Smart University, United Arab Emirates <b>Room 6</b>	<b>Artificial Intelligence and frontier technologies for OER</b> Communication and Information Sector, UNESCO <b>Room 7</b>	<b>Artificial intelligence and Inclusion: Why it matters for reaching the SDGs?</b> UNESCO IITE and UNESCO Section of Education for Inclusion and Gender Equality <b>Room 3</b>	<b>The holistic approach: Open data and AI</b> Communication and Information Sector, UNESCO <b>Room 9</b>
			<b>'Creativity and Heritage' Workshops</b>	
			<b>Create / 2030: AI for creativity</b> Culture Sector, UNESCO <b>Room 7</b>	
			<b>AI challenges for cultural heritage preservation</b> Culture Section, UNESCO <b>Room 5</b>	

# SYMPOSIUM

Day 3 and 4 – Wednesday, 6 March 2019 and Thursday, 7 March 2019

*The Symposium is the summit event of Mobile Learning Week. During the two-day event, UNESCO will gather participants from around the world to share experiences and plan joint actions with a view to harnessing AI to achieve Sustainable Development Goal 4 (SDG 4). It will feature keynote speeches, high-level plenary addresses, demonstrations of AI applications and numerous breakout sessions.*

## Symposium

Wednesday, 6 March 2019

Interpretation is provided in English and French in Room 1

08:00 – 08:50	<b>Registration</b>	
08:50 - 09:00	<b>AI music</b> <b>Mobile Learning Week Song: Taryn Southern, Break Free, Instrumentation composed with AI</b>	Room 1
09:00 – 9:30	<b>Opening ceremony</b> Moderator: Mr Borhene Chakroun, Director, Division for Policies and Lifelong Learning Systems, UNESCO Master of ceremony: Mr Valtencir Mendes, Project Officer, Unit for ICT in Education, UNESCO • Ms Stefania Giannini Assistant Director-General for Education, UNESCO • Mr Kemal Huseinovic, Chief of the Infrastructure, Enabling Environment and E-Applications Department/ BDT, ITU	Room 1
09:30 – 11:00	<b>Keynote 1: How do AI trends reshape education?</b> • Ms Lynn Dai, Product Executive Director, SenseTime • Mr Anthony Salcito, Vice-President of Worldwide Education, Microsoft <b>Plenary #1   Ensuring inclusive and equitable use of Artificial Intelligence in education</b> Without policy intervention, the deployment of AI in education can exacerbate digital divides and learning inequality, with marginalised and disadvantaged groups most at risk of being excluded from AI-powered education. To ensure equitable use of AI in education, large-scale initiatives are needed to support developing countries in boosting the development of AI technology, enabling access to AI platforms and resources, and nurturing local innovations in AI. Can AI break through barriers for vulnerable groups to access quality education? What kind of strategies or programmes are needed to prevent gender bias in AI applications? What should be put in place to promote gender equality in AI professionals and AI skills development? Moderator: Mr Borhene Chakroun, Director, Division for Policies and Lifelong Learning Systems, UNESCO • H.E. Mr Ibrahim Guimba Saidou, Minister Special Advisor to the President of the Republic of Niger & CEO of the National Agency for Information Society (ANSI), Niger • Mr Andrew Williamson, Vice President, Huawei, China • Ms Hanan Salam, Co-founder of Women in AI, France • Ms Kate Radford, Programme Director of 'Can't Wait to Learn', UK • Ms Elena Sinel, Founder of Teens in AI and Acorn Aspirations, Uzbekistan	Room 1
11:00 – 11:30	<b>Coffee break</b>	
	<b>Programming with Scratch presented by the children of the UNESCO kindergarten</b>	Exhibition area

11:30 – 13:00	<b>Breakout sessions   TRACK 1 - Ensuring inclusive and equitable use of Artificial Intelligence in education</b>	
	<b>1. How is AI used to support and educate refugees?</b> Moderator: Ms Kerstin Holst, Chief, Desk for Education in Emergencies, UNESCO <ul style="list-style-type: none"> <li>• Digital inclusion in the AI era: Ensuring work skills relevancy for refugees and migrants Ms Jean Guo, USA</li> <li>• Learning beyond borders: Refugee Camps Education Ms Florie Zheng, Ms Lucia Gallardo, Ginkoo, China</li> <li>• AI to ensure equitable access to education globally Ms Prya Lakhani, CENTURY Tech and Ministry of Education and Higher Education, Lebanon</li> <li>• AI-based reporting tool to help better manage humanitarian aid Mr Carsten Boekholt, SAP, Singapore</li> <li>• Using AI and gamification to bridge language barriers for refugees Ms Elissa Glorie, Travis Foundation, Australia</li> </ul>	Room 5
	<b>2. How can the inclusive use of AI promote inclusion in education?</b> Moderator: Mr Hani Eskandar, ICT Applications Coordinator, ITU <ul style="list-style-type: none"> <li>• Offline data and model training for inclusive AI for students and teachers Mr Richard Tibbles, Learning Equality, USA</li> <li>• The application of augmented reality (AR) in high school science course teaching Ms Guihua Wang and Mr Tianshuai Guan, Beijing Royal School, China</li> <li>• Enhancing the learning process of people with special needs using wearables and AI Mr Karthik Shivashankar, University of Surrey, UK</li> <li>• Developing AI skills to ensure an inclusive society Ms Stella Uzochukwu-Denis, Odyssey Educational Foundation, Nigeria</li> <li>• AI and data: Who owns and who manages Mr Anantha Duraipappah, UNESCO MGIEP</li> </ul>	Room 6
	<b>3. How can AI be harnessed AI to reduce the learning inequity?</b> <i>(transcription in French provided by machine translation program)</i> Moderator: Ms Michela Pagano, Associate Project Officer, Unit for ICT in Education, UNESCO <ul style="list-style-type: none"> <li>• An AI-empowered online one-on-one tutoring system to educate students in rural areas Mr Mohamed Ally, Beijing Normal University, China</li> <li>• Amrita Learning: Intelligent tutoring system for urban and rural schools Ms Prema Nedungadi, AmritaCREATE, India</li> <li>• Education and computer games: Using AI to improve learning with Gidimo in Africa Ms Joy Okah-Edemoh, Pan-Atlantic University, Nigeria</li> <li>• Using innovative edtech, including gamification, VR and chatbots, for humanitarian learning Mr Atish Gonsalves, Humanitarian Leadership Academy, UK</li> <li>• Designing AI projects with low cost technology for researchers and learners in disadvantaged populations Ms Bridget Bannerman, Science Resources Africa, Guinea-Bissau</li> </ul>	Room 7
	<b>4. Will AI promote equity and gender equality?</b> Moderator: Ms Justine Sass, Chief, Section of Education for Inclusion and Gender Equality, UNESCO <ul style="list-style-type: none"> <li>• Empowering girls and mothers to use AI to solve problems in their communities Ms Tara Chklovski, Iridescent, USA</li> <li>• AI for literacy education in least developed contexts Ms Bosen Liu, Ladder Education Group</li> <li>• 'I'd Blush if I Could': The gendering of AI digital assistants and its repercussions Mr Mark West, UNESCO</li> <li>• Integrating education, AI technology, and SDGs: A three-pronged collaboration Ms Neus Lorenzo, Mr Ray Gallon, Transformation Society, France</li> </ul>	Room 9
	<b>Side event</b> <b>Working towards 'AI in Education Policy Guidelines'</b> <b>Experts:</b> UNESCO, ITU, ProFuturo Foundation, Beijing Normal University, and Open University Moderators: Ms Shafika Isaacs, University of Johannesburg, South Africa and Mr Fengchun Miao, Chief, Unit for ICT in Education, UNESCO	Room 3

13:00 – 14:00	<b>Lunch break</b>	
14:00 – 14:40	<p><b>Partners speeches I:</b>  <b>Promoting open partnership for universal and equitable use of AI in education</b></p> <p>Moderator: Mr Valtencir Mendes, Project Officer, Unit for ICT in Education, UNESCO</p> <ul style="list-style-type: none"> <li>• Mr Wang Guangfa, Chairman, Fazheng Group, China <i>Transcription in English provided by machine translation</i></li> <li>• Mr Raphael Moraglia, CEO, Skillogs, France</li> <li>• Ms Serine El Salhat, Vice Chancellor for International Cooperation &amp; Corporate Communication, Hamdan Bin Mohammed Smart University, UAE</li> </ul>	Room 1
14:40 – 16:40	<p><b>Keynote 2: Artificial Intelligence and human grammars: Can we design better languages?</b></p> <p>Mr Andrea Moro, Neuroscientist and Professor of general linguistics at University School for Advanced Studies IUSS Pavia, Italy</p> <p><b>Plenary #2   Leveraging AI to enhance education and learning</b></p> <p>There is no doubt that AI will revolutionize the delivery and management of education, provision of content, and analytics of learning. But how can AI solutions improve learning outcomes? Will AI help learning scientists better understand how learning happens? There is little doubt that teachers will not be replaced by machines in the future, but how the use of AI in education and learning will transform the role of teachers? What continuous support is needed to prepare teachers to work with AI in an AI-rich education environment? As AI is transforming all areas of human life, how can education prepare learners with human-machine collective intelligence to live and work together with AI for sustainable development?</p> <p>Moderator: Mr Fengchun Miao, Chief, Unit for ICT in Education, UNESCO</p> <ul style="list-style-type: none"> <li>• Mr Andreas Schleicher, Director for Education and Skills, OECD</li> <li>• Mr Simon Walker, CEO of STEER, UK</li> <li>• Mr Ronghuai Huang, Director of the National Engineering Center for Cyberlearning and Intelligent Technology, Beijing Normal University, China</li> <li>• Ms Priya Lakhani, Founder of Century Tech, winner of the 2018 MIT Solve's Challenge Prize, and founder of the AI equitable access to education programme with the Ministry of Education and Higher Education, Lebanon</li> <li>• Ms Ulla Maarja Koivula, Director of Thinglink, Finland</li> </ul>	Room 1
16:40 – 17:00	<b>Coffee break</b>	
17:00 – 18:30	<p><b>Breakout sessions   TRACK 2 - Leveraging AI to enhance education and learning</b></p> <p><b>1. Human-machine collective intelligence: What is the way forward?</b></p> <p>Moderator: Ms Jonghwi Park, Programme Specialist, UNESCO Bangkok</p> <ul style="list-style-type: none"> <li>• Using learning analytics in complex environments on a global scale Ms Paula Valverde, ProFuturo Foundation</li> <li>• Predictive modeling and machine learning to drive reader engagement Mr Periša Ražnatović, Worldreader</li> <li>• AI for education interventions beyond the classroom Mr Kwaku Ofori, National Information Technology Agency, Ghana</li> <li>• Cognitive AI disrupting lifelong learning Mr Harri Ketamo, Headai Ltd, Finland</li> <li>• Next Generation By Design: Optimizing digital exchange for chatbots and AI technologies to enhance learning Mr Dale Allen, DXtera Institute and Mr Francesc Santanach, Universitat Oberta de Catalunya</li> </ul>	Room 5

	<p><b>2. How can AI boost education and learning management systems?</b></p> <p>Moderator: Mr Lindsay Young, Associate Project Officer, Unit for ICT in Education, UNESCO</p> <ul style="list-style-type: none"> <li>• How can we increase students' motivation and engagement in intelligent LMS using gamification and AI? Mr Seiji Isotani, University of São Paulo, Brazil</li> <li>• Multi-agent technique towards enhancing learning management systems Mr Mohamed Abdel Razek, Al Azhar University, Egypt</li> <li>• Talking books with an AI-boosted learning management system Ms Rokhaya Diawara, UNESCO Abuja</li> <li>• Applying AI to improve scores on international assessments by monitoring learning conditions Mr Ali Al Yafei, Ministry of Education, UAE</li> <li>• LabXchange: An open-source platform for personalized learning and challenge-driven education at a global scale Mr Robert Lue, Harvard University, USA</li> </ul>	Room 6
	<p><b>3. How can AI improve learning? (session in Spanish)</b> <i>(session in Spanish, transcription in English provided by machine translation program)</i></p> <p>Moderator: Mr Rossieli Soares, former Minister of Education and current Education Secretary of São Paulo State, Brazil</p> <ul style="list-style-type: none"> <li>• Enabling innovative learning in Latin American universities: What is the role of AI? <i>Facilitar el aprendizaje innovador en las universidades latinoamericanas: ¿cual es el rol de IA?</i> Ms Mildred Vanessa López Cabrera, Tecnológico de Monterrey ITESM, Mexico</li> <li>• Understanding AI in primary Education <i>Entendiendo la Inteligencia Artificial en la enseñanza elemental</i> Mr José Manuel Sáez López, Universidad Nacional de Educación a Distancia, Spain</li> <li>• How to apply AI in language Learning <i>Como aplicar la IA en el aprendizaje de lenguas extranjeras por mobile learning</i> Ms Izabel de Andrade, Serviço Nacional de Aprendizagem Industrial (SENAI), Brazil</li> <li>• Mobile learning from the base: From augmented and virtual reality to AI <i>Aprendizaje móvil desde la base: desde la realidad aumentada y virtual a la inteligencia artificial</i> Ms Verónica Iglesias Fustes, CEIP Ponte dos Brozos, Spain</li> <li>• Children in social vulnerability: Leading AI in public schools <i>Niños en vulnerabilidad social: Inteligencia Artificial en escuelas públicas</i> Ms Yesenia Venegas, Fundación Quirós Tanzi, Costa Rica</li> </ul>	Room 7
	<p><b>4. How can AI implications empower teachers?</b></p> <p>Moderator: Mr Edem Adubra, Chief, Section of Teacher Development (Secretariat of the International Task Force on Teachers), UNESCO</p> <ul style="list-style-type: none"> <li>• Tech for teachers: What educators need to know about AI Ms Scarlet George, Oxford Insights</li> <li>• mJangale: Teaching STEAM to youth in Senegal through AI Ms Christelle Sharff, mJangale, USA</li> <li>• The teacher assistant to assure quality of education to everyone Mr Antonio Alger, ese+, El Salvador</li> <li>• Using AI to support teachers and teacher development Ms Ines da Silva, UNESCO</li> <li>• Symbolic AI and machine learning: Playing nice together at last Mr Elliot Soloway, Ms Cathie Norris, University of Michigan, USA</li> </ul>	Room 9
	<p><b>Side event</b></p> <p><b>The Global Digital Library: Prototyping new reading experiences with AI</b></p> <p>Moderator: Ms Liv Marte Kristiansen Nordhaug, Senior Adviser NORAD, Norway</p>	Room 3
18:30 – 20:30	<b>Reception</b>	Hall Ségur

# Symposium

**Thursday, 7 March 2019**

**Interpretation is provided in English and French in Room 1**

09:00 – 11:00	<p><b>Keynote 3: Emerging strategies for promoting the next-generation of AI development</b></p> <p>Mr Ke Gong, Executive President, Chinese Institute of New-Generation Artificial Intelligence Development Strategies, China</p> <p>Master of ceremony: Mr Valtencir Mendes, Project Officer, Unit for ICT in Education, UNESCO</p> <p><b>Plenary #3  Promoting skills development for jobs and life in the AI era</b></p> <p>Emerging technology trends related to the digital transformation, such as AI, machine learning, IoT, and big data analytics, have profound implications in terms of the skills required for the evolving digital economy. In particular, the notion of lifelong learning has emerged as one of the key strategies for job security and employment in the digital era.</p> <p>How will AI impact the labour market and what AI-related skills are needed today and in the future by different sectors? How can educational institutions and training providers from both public and private spheres can address any existing or emerging skill gaps?</p> <p>What recent developments and concrete case studies about industry talent development programmes, academic programmes as well as other initiatives that have been implemented to address the emerging skill gaps?</p> <p>Moderator: Ms Susan Teltscher, Head, Human Capacity Building Division, ITU</p> <ul style="list-style-type: none"> <li>• Ms Hakima Chaouchi, Professor, Institut Mines Telecom, Telecom Sud Paris and French Research Ministry ICT Advisor, France</li> <li>• Mr Paul Comyn, Senior Skills and Employability Specialist, Employment Policy Department, International Labour Organization</li> <li>• Mr Detlef Eckert, Vice-President, Global Government Affairs, Huawei</li> <li>• Ms Ivana Bartoletti, Founder, Women Leading in AI Network and Head of Privacy and Data Protection, Gemserv, UK</li> <li>• Mr Deb Deep Sengupta, President and Managing Director, SAP, India</li> <li>• Mr Marc Fiammante, Technical Director for European Governments, IBM</li> </ul>	Room 1
11:00 – 11:20	<p><b>Coffee break</b></p> <p><b>Artificial Intelligence in schools: Are you ready for it?</b> Presentation of the case of Colegio Miguel de Cervantes (Brazil) and the mSchools (Spain) by the UNESCO-Fazheng project</p>	Exhibition area
11:20 – 12:50	<p><b>Breakout sessions   TRACK 3 - Promoting skills development for jobs and life in the AI era</b></p> <p><b>1. What skills and values are needed for jobs and life in the AI-rich era?</b> Moderator: Mr Hiromichi Katayama, Programme Specialist, Section of Youth, Literacy and Skills, UNESCO</p> <ul style="list-style-type: none"> <li>• Questioning inclusiveness using AI to bridge learning gaps matching industry needs and profiles for engineers Ms Inge de Waard, InnoEnergy, Belgium</li> <li>• Experiences and lessons learned on recruiting and building AI competence: A multinational perspective from Ericsson Mr Paul Landers, Ericsson, Sweden</li> <li>• The link for preparing students to thrive in AI careers of the future Mr Richard Culatta, International Society for Technology in Education</li> <li>• Using a mobile application and tangible tokens to introduce rural learners to coding Mr Jean Greyling, Nelson Mandela University, South Africa</li> </ul> <p><b>2. How can AI skills be developed effectively in different contexts?</b> Moderator: Ms Anett Domiter, Associate Project Officer, Unit for ICT in Education, UNESCO</p> <ul style="list-style-type: none"> <li>• Experimenting with AI in the classroom Mr Albert Forn, mSchools, GSMA</li> <li>• Humanizing algorithmic societies: New approach to Media and Information Literacy Education Ms Tatiana Murovana, UNESCO IITE, Russia</li> <li>• Intelligent mobile learning for the hardest to reach: Tackling adult literacy Ms Jessica Rothenberg-Aalami, Cell-Ed, USA</li> </ul>	Room 5  Room 6

	<ul style="list-style-type: none"> <li>Starting from scratch: Digital literacy in rural areas Ms Susana Muñoz Hernández, Universidad Politecnica de Madrid, Spain</li> <li>AI curriculum for K-12 teachers and students Ms Lucie Luneau, Kids Code Jeunesse, Canada</li> </ul>	Room 6
	<p><b>3. How can AI be harnessed to inform skills development and assessment?</b></p> <p>Moderator: Ms Ethel Agnes Pascua-Valenzuela, Deputy Director for Programme and Development, SEAMEO Secretariat</p> <ul style="list-style-type: none"> <li>Games in the age of thinking machines: Leveraging AI to enhance game-based learning Mr Ali Alshammari, University of Tabuk, Saudi Arabia</li> <li>Evaluation in education with AI Mr Parmod Kumar, Ms Avinasha Sharma, Directorate of School Education, India</li> <li>The innovation of higher education in the AI context Mr Li Ming, International Centre for Higher Education Innovation, China</li> <li>Employment map: Building an employment tool using big data Mr Luis Miguel Olivas, Telefónica Foundation</li> <li>Paving the way towards a better future: HBMSU School of AI Ms Souma Alhaj Ali, Hamdan Bin Mohammed Smart University, UAE</li> </ul>	Room 7
	<p><b>4. Working towards AI-ready education and lifelong learning systems</b></p> <p>Moderator: Ms Lina Benete, Programme Specialist, UNESCO Almaty</p> <ul style="list-style-type: none"> <li>How 'augmented intelligence' can raise learning outcomes Mr Ray Douse, Whizz Education, UK</li> <li>The importance of openness in developing AI in education Mr Neil Butcher, OER Africa, South Africa</li> <li>Bridging the gaps in education through transforming teaching and learning with AI-based solutions in Africa Ms Jingxin Bao, UNESCO IICBA</li> <li>Leveraging AI within connected learning: Opportunities and constraints Mr Charley Wright, UNHCR</li> <li>A holistic approach towards the use of AI in education Ms Svetlana Malkarova, State University of Management, Russia</li> <li>Creative Program Design: Creating relevant AI skills Mr Manuel Pereira Colocci and Mr Samuel Gordon, US Department of State, USA</li> </ul>	Room 8
	<p><b>Side event</b></p> <p><b>Preparing post-millennials for their AI future by cultivating a growth mindset and developing habits of mind</b></p> <p>Beijing Royal School, China</p>	Room 9
12:50 – 14:00	<b>Lunch break</b>	
14:00 – 15:30	<p><b>Breakout sessions   TRACK 2 – Leveraging AI to enhance education and learning (cont.)</b></p> <p><b>1. How can AI boost education and learning management systems?</b></p> <p>Moderator: Mr Peter Wells, Chief, Section for Higher Education, UNESCO</p> <ul style="list-style-type: none"> <li>Digital Intelligence Virtual Assistant (DIVA) Ms Helen Crompton, Old Dominion University, USA</li> <li>Realizing ShiraX, an open-source platform that creates turnkey AI-based educational apps for autonomous learning Mr Jason Bavington, Midnight Illusions, Canada</li> <li>Moodle, the de facto learning platform to facilitate research and experimentation with educational data Mr David Monllaó Olivé, Moodle, Spain</li> <li>How to use big data/learning analytics to find out success cases inside social programs Ms Milada Gonçalves and Mr Rubem Saldanha, ProFuturo Foundation, Brazil</li> <li>AI in education in Kenya and Malawi: A view from the ground Mr Salim Salamah and Mr Jamie Proctor, Department for International Development, UK</li> </ul>	Room 5

14:00 – 15:30	<p><b>2. How can AI improve learning?</b></p> <p>Moderator: Mr John Moravec, Founder of Education Futures</p> <ul style="list-style-type: none"> <li>• AI to support human intelligence Mr Andreas Hörfurter, Common sense eLearning, Austria</li> <li>• Use of biometric tools based on AI for the identification of participants in MOOCs Ms Lorena Alemán de la Garza, Ms Marcela Georgina Gómez Zermelo, Tecnológico de Monterrey, Mexico</li> <li>• Student-centered design for AI Projects: How to use design techniques to evaluate AI projects Mr Diogo Cortiz, Network Information Center</li> <li>• mHealth learning and app development for health diagnoses and tracking with AI Mr Dominic Mentor, Columbia University, USA</li> <li>• How Wikipedia is using AI in education Ms Nichole Saad, Wikimedia Foundation</li> </ul>	Room 6
	<p><b>Side event</b></p> <p><b>Supporting curriculum alignment with AI: Lessons from refugees with education platforms</b></p> <p>UNHCR – the UN Refugee Agency, Google.org, Learning Equality, Vodafone Foundation</p> <p>This side meeting will continue by a follow up activity entitled Design Sprint on Curriculum Alignment in Crisis Contexts, to take place on 11 and 12 March 2019 on the 7th floor (invitation only).</p>	Room 7
	<p><b>Side event</b></p> <p><b>Using AI and OER data: Convergence among OER platforms offers unprecedented opportunities</b></p> <p>Knowledge 4 All foundation, UNESCO Chairs in Open Educational Resources (OER) and Artificial Intelligence (AI), Slovenian Ministry of Education, Science and Sport</p>	Room 8
15:30 – 15:50	<p><b>Coffee break</b></p>	
	<p><b>Artificial Intelligence in schools: Are you ready for it?</b></p> <p>Presentation of the cases of Beijing Royal School (China) and the Primary School Ponte dos Brozos (Spain) by the UNESCO-Fazheng project</p>	Exhibition area
15:50 – 16:20	<p><b>Partners speeches II:</b></p> <p><b>Promoting open partnership for universal and equitable use of AI in education</b></p> <p>Moderator: Ms Shafika Isaacs, University of Johannesburg, South Africa</p> <ul style="list-style-type: none"> <li>• Mr Hao Gong, Chairman, Huashi Education Group, China</li> <li>• Ms Liv Marte Kristiansen Nordhaug, Senior Advisor, Norad, Norway</li> <li>• Ms Zohra Yermeche, Program Director, Ericsson, Sweden</li> </ul>	Room 1
16:20 – 17:40	<p><b>Plenary #4   Safeguarding transparent and auditable use of education data</b></p> <p>The unconscious use of data by machine learning has intensified concerns about ethics and security in using AI for manipulating individual data across all areas. Educational institutions, students and especially children are more susceptible to the threat. How should regulatory frameworks respond to the ethical dilemma between making education data available and protecting the privacy of learners' personal data? How can technology innovations like the decentralized or distributed data technologies help solve data problems caused by technology? Will the next generation of AI development enhance privacy protection of learners' data and enlighten the hidden perils in the use of AI in education?</p> <p>Moderator: Mr Tao Zhan, Director, UNESCO IITE</p> <ul style="list-style-type: none"> <li>• Mr Edson Prestes, Head of the Robotics Research Group, Federal University of Rio Grande do Sul, Brazil</li> <li>• Ms Alexandra Bensamoun, Professor and member of the French working group on AI's legal and regulatory challenges, France</li> <li>• Mr Wayne Grixti, CTO at Malta Digital Innovation Authority, Chairman MALTA.AI Taskforce, Malta</li> </ul> <p>Special guest: Mr Amir Fehri, 15-year-old student and writer, Tunisia</p>	Room 1
17:40 – 18:30	<p><b>Keynote 4: What human-machine collective intelligence should be developed to enable human to live and work together with AI?</b></p> <p>Moderator: Mr Borhene Chakroun, Director, Division for Policies and Lifelong Learning Systems, UNESCO Mr François Taddei, President of The CRI Center for Research and Interdisciplinarity, France</p> <p><b>Symposium closing ceremony</b></p> <p>Mr Borhene Chakroun, Director, Division for Policies and Lifelong Learning Systems, UNESCO</p>	Room 1
18:30-18:40	<p><b>AI music</b></p> <p><b>Mobile Learning Week Song: Taryn Southern, Break Free, Instrumentation composed with AI</b></p>	Room 1



# Strategy Labs International Women's Day

Day 5 – Friday, 8 March 2019

*The Strategy labs will convene interested partners to launch major initiatives and conceptualize collaborative projects that seek to harness AI's potential in accelerating the achievement of SDG 4.*

STRATEGY LABS		
09:00 – 11:30	<b>Strategy Lab 1 - AI Global Goods for Education</b> ITU and UNESCO	Room 3
	<b>Strategy Lab 2 – AI for SDG 4: Towards a global consensus on AI in education</b> UNESCO, Weidong Group, NORAD, SEAMEO and Huawei	Room 6
	<b>Strategy Lab 3 – AI in a box: A free worldwide K-12 mobile and TV network</b> Skillogs	Room 7
	<b>Strategy Lab 4 – AI in Education Readiness Index</b> UNESCO, Microsoft, ITU, ProFuturo Foundation, Apple and Baidu	Room 8
	<b>Strategy Lab 5 – Using AI to support teachers and teacher development</b> UNESCO and International Task Force on Teachers for Education 2030	Room 5
	<b>Strategy Lab 6 – Artificial Intelligence for youth</b> UNESCO and Ericsson	Room 9
15:00 – 17:00	<b>Strategy Lab 7 – How can AI and collective intelligence be combined to create a GPS for knowledge?</b> Center for Research and Interdisciplinarity and UNESCO This activity is invitation only. To request for participation, please contact: n.aouka@unesco.org	Center for Research and Interdisciplinarity
INTERNATIONAL WOMEN'S DAY		
11:30-13:00	<b>Women online: Challenges for gender equality in the digital space</b> International Women's Day-UNESCO Campus+ event	Room 4
13:00-14:00	<b>Reception</b>	Hall Ségur
14:00-17:00	<b>WIKI4Women 2019</b> <a href="http://on.unesco.org/wiki4women">http://on.unesco.org/wiki4women</a>	Hall Ségur
	<b>AI and Women photo exhibit (1-31 March)</b>	Fences of avenue Suffren

## Mobile Learning Week Exhibitions

Monday 4 March 2019 to Thursday 7 March 2019 – Hall Ségur and Foyer

*Enter and The Punishment*, artistic installations by Filipe Vilas-Boas – Hall Ségur

*dEYEversity*, artistic installation by ALAgrApHY – Hall Ségur

UNESCO, ITU, ProFuturo Foundation and Skillogs, as well as sponsors and supporters, will host a number of side events and information meetings to complement the main programme of Mobile Learning Week.

# UNESCO’s vision on ensuring inclusive and quality education and promoting lifelong learning opportunities for all in the era of AI

Artificial Intelligence (AI) has the potential of bringing new opportunities for enhanced or new forms of learning and offer more flexible lifelong learning pathways. As such, the UNESCO Education Sector has developed initiatives that harness AI to achieve SDG 4, with a particular focus on activities in developing and least developed countries as well as small island developing states.

The framework of these initiatives:

Initiatives	Objectives	Activities
<b>AI-ready education policy makers</b>	To strengthen the capacities of policy makers in developing policies and strategies for leveraging AI to achieve SDG 4	<ul style="list-style-type: none"> <li>• Developing AI-Readiness Index</li> <li>• Developing Guidelines</li> <li>• Organizing trainings</li> </ul>
<b>AI skills development</b>	To promote AI skills development programmes in school curriculum and lifelong learning provisions as well as make high-quality AI training programmes accessible for all	<ul style="list-style-type: none"> <li>• Developing a repository</li> <li>• Guiding the integration of AI in school and TVET institution programmes</li> <li>• Training and mentoring of master trainers</li> </ul>
<b>AI innovations in youth</b>	To enhance training for young people (priority on girls and women) and to nurture youth’s innovations in developing AI applications for SDGs	<ul style="list-style-type: none"> <li>• Trainings for trainers</li> <li>• Mobilizing AI hubs and hackathons</li> </ul>
<b>Equitable use of AI in education</b>	To identify, curate, and make accessible open-source AI tools and platforms, and to advocate the transparent and auditable use of education data	<ul style="list-style-type: none"> <li>• Building partnerships to promote the equitable use of AI</li> <li>• Mobile Learning Week and Prize for AI Applications</li> <li>• Beijing Conference on AI in education</li> </ul>

## Upcoming AI-related activities

- International Conference on Artificial Intelligence and Education**  
 16 – 18 May 2019  
 Beijing, China  
<https://en.unesco.org/events/international-conference-artificial-intelligence-and-education>
- Publication: AI in Education Policy Guidelines**  
 Expected release: May 2019
- Publication: A Guide to Artificial Intelligence (AI) in Education**  
 Expected release date: May 2019
- Publication: A Guide to Blockchain in Education**  
 Expected release date: May 2019

# UNESCO'S WORK ON AI IN EDUCATION



**INITIATIVE**



AI-READY  
EDUCATION  
MAKERS



**IMPACT**

2000  
policy makers  
20  
countries



**ACTIVITIES**



Developing  
AI-Readiness Index



AI in Education  
Policy



Organizing  
Trainings



**INITIATIVE**



AI  
SKILLS  
DEVELOPMENT



**IMPACT**

10  
countries or institutions  
with AI-integrated TVET  
programmes or school  
curriculum



**ACTIVITIES**



Developing an AI skills  
curriculum repository



Developing guides  
and facilitating  
programme  
development



Training and  
mentoring of  
master trainers



**INITIATIVE**



**AI INNOVATION IN YOUTH**



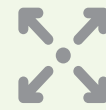
**IMPACT**

**500**

youth/teens trained

**30**

master trainers trained



**ACTIVITIES**



Training of master trainers



Mobilizing AI hubs and hackathons



**INITIATIVE**



**EQUITABLE AND SAFE USE OF AI IN EDUCATION**



**IMPACT**

**1** consensus on equitable, inclusive and safe use of AI in education

**120** countries

informed by international conferences and MLW



**ACTIVITIES**



International partnership to promote equitable and safe use of AI in education



ICT Education Prize for AI



International conferences on AI and education